REMARKS

Statements on Priority

As the examiner noted, Applicant has submitted a certified copy of the priority document Chinese Application 03221812.5 on August 20, 2003. Applicant first transmitted a copy of official Priority Document to one Ms. Shirley Steele via facsimile on December 28, 2004. Enclosed herein are copies of the facsimile cover sheet and its confirmation report verifying the transmission. Also enclosed herein are copies of the transmittal and the postcard sent by Applicant on August 20, 2003, which verifies the receipt by the office on August 20, 2003 of the certified copy of the official Priority Document. Applicant concurrently herewith submits a copy of the certified translation of the priority Chinese patent application. Entry of the priority document translation is respectfully requested.

Amendment to Specification

As indicated in the Office Action, the paragraph starting at page 3, line 8 contained a grammatical error. This error is duly corrected by the foregoing amendments to the specification. Furthermore, the paragraph starting at page 4, line 29 is replaced to correct a typographical error.

The Abstract is also now amended to correct the informalities. Accordingly, the Abstract now presented is in narrative form and limited to a single paragraph within the range of 50 to 150 words.

Amended and New Claims

Claim 1 was amended to correct a grammatical error, reciting "a shooting chamber" instead of "an shooting chamber." Claim 1 was further amended to merely to clarify the meaning of the claims. The scope of the claims has not been narrowed and no narrowing is intended. Support for amended Claim 1 is found at least on specification page 7 lines 13-29 as originally filed.

Claims 6-11 are new. Support for these new claims can be found at, for example, page 6, line 20 to page 7, line 29 of the present specification, as originally filed. No new matter is introduced.

Rejections under 35 U.S.C. § 103

Applicant's Invention

The claimed invention is directed to an automatic safe disposable blood sampling device. The device includes a lancet 3 that is locked into a position by a locking and shooting structure, which is provided at one side of the device. The locking and shooting structure comprises an elastic arm button 5 on the side of the device. The elastic arm button 5 includes an end that faces into a locking hole 12, which is provided at the side of the device. An elastic arm 6, an extended structure off the lancet 3, can engage the locking hole 12. The elastic arm 6 is provided with a catching groove 14, which employs bevel surfaces and engages the side walls of the locking hole 12 in a locking state so that the lancet and the spring 4 are in a compressed state to be ejected. Therefore, when the free end of the elastic arm 6 is engaged with the locking hole 12, the lancet is locked in a compressed position. To disengage the elastic arm 6, the elastic arm button 5 is pressed downwardly. Upon this actuating motion by the elastic arm button, the elastic arm 6 is bent inwardly towards the lancet 3 and thereby disengages from the locking hole 12. As there is no impediment holding back the lancet 3 at that moment, the lancet 3 is released from its locking position and under spring action moves towards a target area of a subject for sample collection. Therefore, the locking and shooting structure acts as a shoulder to hold the lancet in a locked position. Furthermore, position-wise, the locking and shooting structure is located at a side of the device.

With these features in mind, we now address the cited prior art reference.

35 U.S.C. § 103(a) Rejection of Claims 1-5

Claims 1-5 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,719,771 to Crossman (hereinafter "Crossman") in view of U.S. Patent No. 5,304,193 to Zhadanov (hereinafter "Zhadanov"). The examiner stated that "Crossman discloses a disposable blood sampling device including a case (1) defining a shoot chamber with a lancet exiting hole (9), a lancet (2) slidably disposed within the shoot chamber with a puncturing tip pointed toward

the lancet-exit hole, a spring disposed at the back of the lancet in a shooting direction of the lancet, and a locking and shooting structure (21, 28) provided on the side of the lancet and the side of case. The locking and shooting structure is composed of an elastic arm button (18) on the case and an elastic arm (28) on the lancet." (*See* page 3, paragraph 1 under "Claim Rejection - 35 USC §103".) The examiner specifically points to Fig. 8 of Crossman to indicate that Crossman discloses that the elastic arm is provided with a notch, which forms a self-destructive breaking point of the elastic arm.

Applicant respectfully disagrees. The present invention recited in claim 1 is non-obvious over Crossman in view of Zhadanov because Crossman teaches away from a disposable blood sampling device with any type of a shoulder. (*See* col. 1, lines 28-39 of Crossman.) Referring to the shoulder feature in the device claimed in European Patent No. EP 0582226 (hereinafter "EP '226 patent"; the corresponding U.S. Patent is Patent No. 5,356,420) under the Description of the Related Art section, Crossman criticized, discredited, or otherwise discouraged the merit of employing a shoulder in a blood sampling device: "[the shoulders] will drag against the inside of the barrel of the firing device and impede retraction." (*See* col. 1, lines 29-32.)

In contrast, despite Crossman's recommendation against having any type of a shoulder to hold the lancet in a locking position, the present invention employs the elastic arm, which corresponds to the shoulder in the EP '226 patent, without such impediments that Crossman noted. Like the shoulder in the EP '226 patent, the elastic arm extends from one side of the lancet and holds the lancet in a locking position as it is pushed against the side walls of the locking hole 12 of the case 1 on which the catching groove 14 makes contact with the side wall. Contrary to the device in the EP '226 patent, however, the elastic arm of the present invention operates without impediments or minimally impeded. Because of the indention 7, on which stress can be easily concentrated, the elastic arm is broken upon actuation when the elastic arm button is pushed downwardly. Therefore, as a part of the elastic arm gets broken off and detaches from the lancet, the broken part falls wayside in the case and does not drag against the inside of the case. Even if the elastic arm was not completely broken off, the elastic arm is sufficiently broken that it is loosely hung onto the lancet, causing minimal drag. Therefore, the

present invention operates proficiently despite having the elastic arm extending from the side of the lancet.

Furthermore, the present invention recited in claim 1 is non-obvious over Crossman in view of Zhadanov because the present invention has the following structural differences from that of Crossman combined with Zhadanov:

1. Comparing the embodiment described in Fig. 8 of Crossman, the elastic arm of the present invention is located at the side of the lancet compared to the analogous structure, head 28, located at one end of the lancet in Crossman.
2. Unlike the head 28 in Crossman, which engages with the web 11 housed in the case at one end of the lancet, the elastic arm of the present invention engages with the locking hole, which is located at the side of the case corresponding to a side of the lancet.
3. Instead of a direct force (i.e. the transverse guillotine blade applied to the head) applied to slice off the head of Crossman, the elastic arm of the present invention is effectively broken as a result of indirect force (instead of broken at the point of contact between the elastic arm button and the elastic arm, the elastic arm is broken at the notch 7, away from the point of contact).
4. Instead of held in a locking position by two symmetrical webs 11 as in Crossman, the lancet in the present invention is held by the elastic arm, which is an asymmetrical structure.

The Sum of these structural differences between Crossman and the present invention recited in claim 1 is more than a mere combination of the prior art elements in a particular manner. Perhaps it may be argued that the difference between the location of the head in Crossman and the elastic arm in the present invention can be bridged by the teaching in Zhadanov. While Zhadanov teaches an elastic arm located at the side of the device, however, the elastic arm of Zhadanov is not self-destructive as in that of the present invention. Therefore, the present invention recited in claim 1 would not be obvious to one skilled in the art. Accordingly, Applicant respectfully requests the rejections of claim 1 be withdrawn under 35 U.S.C. 103(a).

CONCLUSION

In view of the above amendments and remarks, it is believed that all claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned.

Respectfully submitted,

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